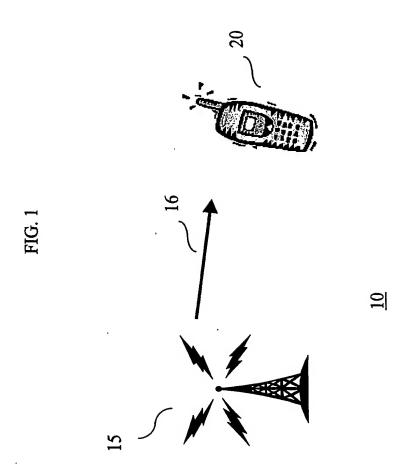
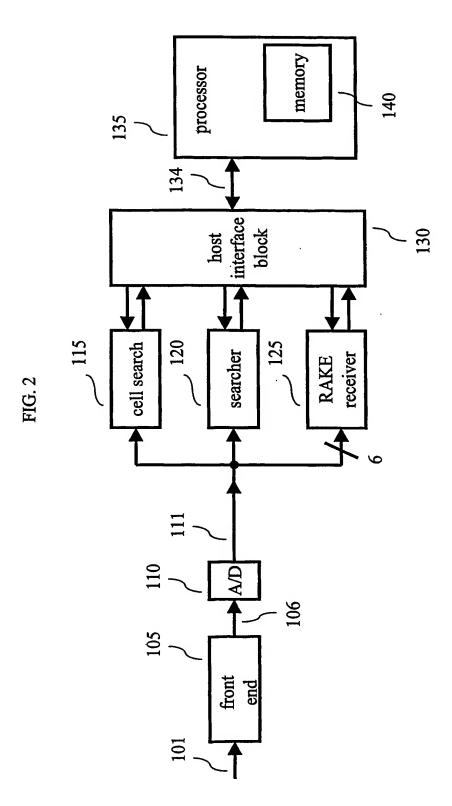
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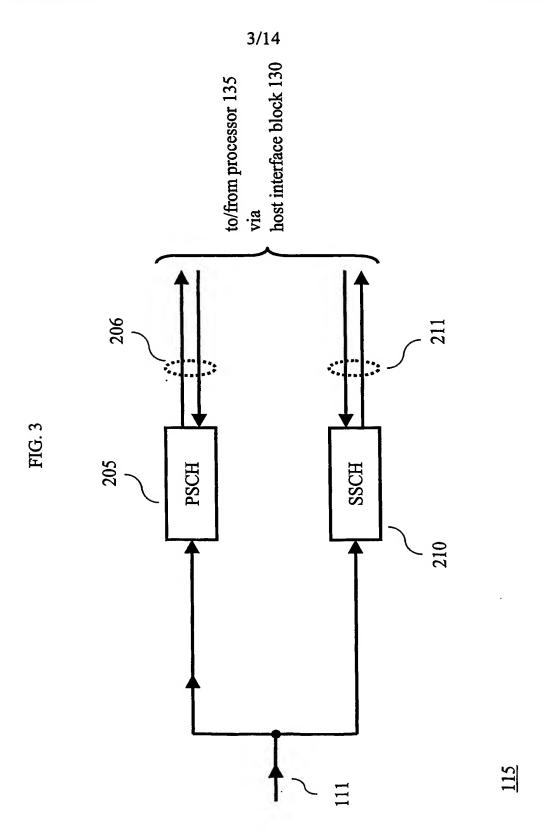
1/14

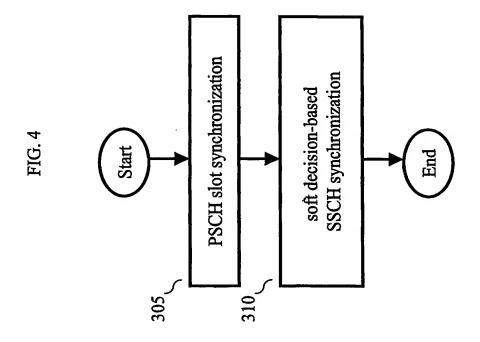


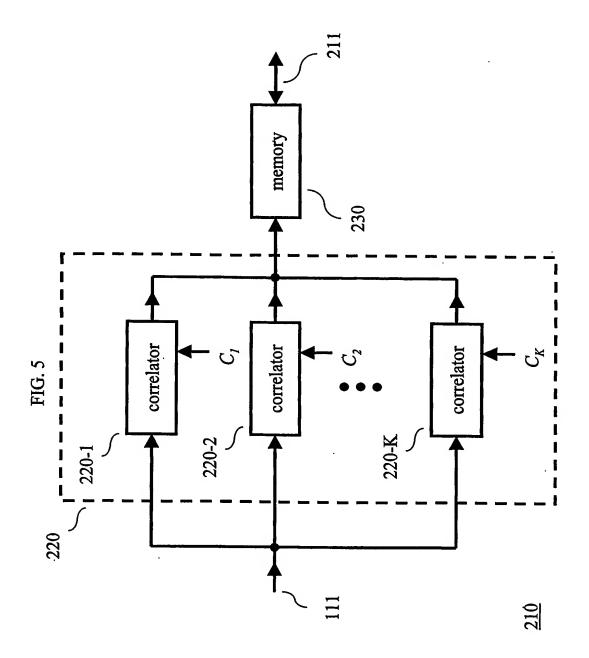


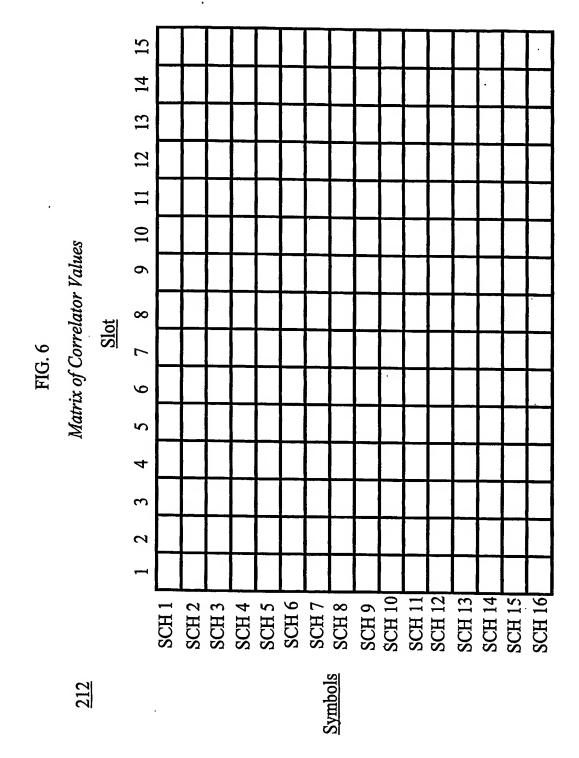


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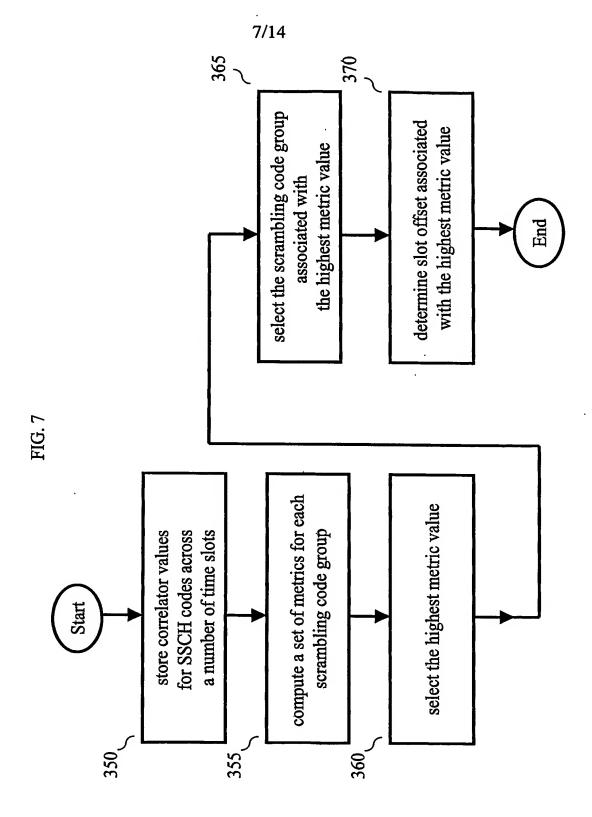








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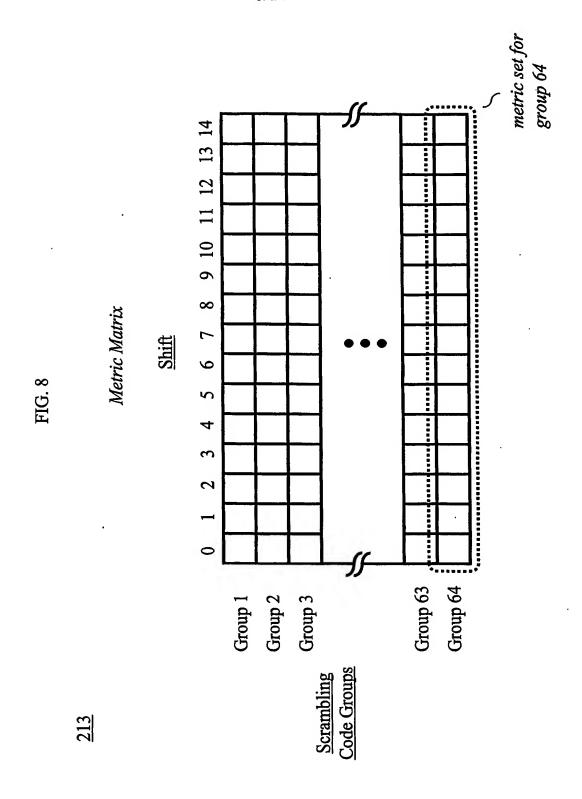


FIG. 9

Matrix of Correlator Values

Slot

Code Alphabet = $\{1, 2, 3, 4\}$

1 2 7 2 16 4 3 5 17 4 3 6

Symbols

'IG. 10

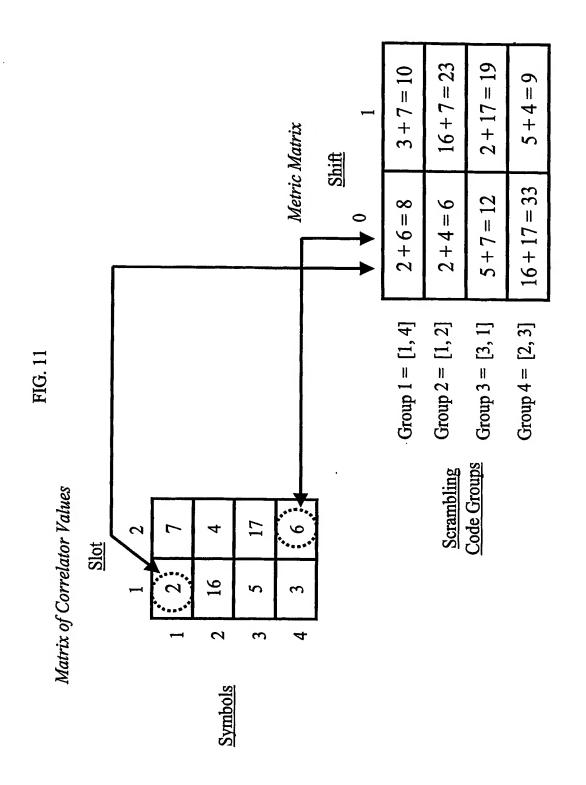
Metric Matrix

Shift

Scrambling Code Groups

,	0	1
Group 1	2 + 6 = 8	3 + 7 = 10
Group 2	2+4=6	16 + 7 = 23
Group 3	5+7=12	2 + 17 = 19
Group 4	16 + 17 = 33	5 + 4 = 9

Group 1 = [1, 4]Group 2 = [1, 2]Group 3 = [3, 1]Group 4 = [2, 3]



```
confidence_bins(i, slot_cnt) = confidence_bins(i, slot_cnt) + abs(rx_data[1:256] * SSC[i,1:256]
                                                                                                                                                                                                                                                                                                                                                                                                               val = confidence_bins[group_seq[code_group, mod(slot + shift, 15)], slot]
                                                                                                                                                                                                                                                                                                                                                                                                                                          metric[code_group, shift] = metric[code_group, shift] + val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    max_val = metric[code_group, shift]
                                                                                                                                                                   // 16 parallel correlations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     if (metric[code_group, shift] > max_val)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             group = code_group
                                                                                                           // compute confidence values from 16 parallel correlations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     offset = shift
                                                                                                                                                                                                                                                                                                  // compute metrics to find match with highest confidence
                                                                                                                                        // 15 slots
                                                                                                                                                                                                                                                                                                                                                                                     for slot = 1 to 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          // find max value in metrics matrix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 end
                           confidence_bins[16,15] = 0
                                                                                                                                                                                                                                                                                                                                                        for shift = 1 to 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for shift = 1 to 15
                                                                                                                                                                                                                                                                                                                              for code_group = 1 to 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for code group = 1 to 64
                                                                                                                                                                for i = 1 to 16
                                                                                                                                     for slot_cnt = 1 to 15
// initialize variables
                                                      metric [64, 15] = 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \max_{v} val = 0
                                                                                                                                                                                                                      end
                                                                                                                                                                                                                                              end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            end.
```

